DISTRIBUTED USER MANAGEMENT INFORMATION IN TELECOMMUNICATIONS NETWORKS

This application is a continuation-in-part of U.S. Serial Number 09/683191, filed October 11, 2000, entitled "Utilizing Managed Object Proxies in Network Management Systems", still pending.

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Background

To configure or manage a network device in a telecommunications network, a user typically connects directly to the network device through a network management system. Most network management software is based on the Simple Network

10 Management Protocol (SNMP), and a user connects to a network device by issuing an SNMP command, for example, read/write or read only, followed by a password in the form of a community string. Often, only one community string is used to access the network device, and thus, all users allowed to access the network device must "share" the community string. Sharing the community string and directly connecting a user to

15 the network device reduces the security of the network device.

More advanced systems allow multiple SNMP community strings to be used to gain access to a network device. Generally, these community strings are stored in a table within the network device. Where a large number of users may be connected to the

20 device, however, community strings may still need to be shared or the table in the network device must be very large.

Although one or more community strings may be shared by multiple users and used to access the same network device, community strings are normally different for each

25 network device. Thus, to connect to multiple network devices, a user must separately connect (i.e., issue an SNMP command and community string) to each network device. This may take considerable time and requires the user to remember multiple community strings.